

## **Particulate Matter 2.5 (PM 2.5)**

Particulate matter is the term used for solid or liquid particles found in the air.

PM2.5 refers to particles with a diameter of 2.5 microns (one-millionth of a meter) or less. In comparison, human hair has a diameter of seventy microns.

PM2.5, also referred to as "fine particulate", comes from a wide variety of stationary, mobile, and natural sources. For example, power production, cement manufacturing, combustion, fireplaces, diesel trucks, and forest fires are all sources of particulate emissions.

Concerns for human health from PM2.5 exposure are effects on breathing and the respiratory system. Because of its extremely small size, PM2.5 penetrates the most sensitive parts of the respiratory tract.

Children, the elderly, and those with cardiovascular or chronic lung diseases such as emphysema or asthma are especially sensitive to particulate matter pollution.

The Environmental Protection Agency (EPA) established a new particulate matter standard in July, 1997, to provide more stringent standards for fine particles in the air.

Nineteen air monitoring sites are currently being established across the State to measure the concentration of PM2.5 in the air.

This fact sheet is intended as a summary of issues related to PM 2.5 and is not all-inclusive. To obtain additional information regarding particulate, you may contact the BAQ by phone at (803) 898-4123, access the bureau web page at <http://www.scdhec.gov/environment/baq>, or write to the following address:

*Bureau of Air Quality  
S.C. Department of Health and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201*